

Title (en)

METHOD AND DEVICE FOR NON-INVASIVELY DETERMINING MOISTURE CONTENT AND UNIFORMITY OF SOLID PLANT MATTER DURING ON-LINE DRYING OR COOLING FORCED-AIR TREATMENT

Title (de)

VERFAHREN UND EINRICHTUNG ZUR EINGRIFFSFREIEN BESTIMMUNG DES FEUCHTIGKEITSGEHALTS UND DER GLEICHFÖRMIGKEIT VON FESTEM PFLANZENMATERIAL WÄHREND ONLINE-TROCKNUNG ODER KÜHLBEHANDLUNG MIT DRUCKLUFT

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT DE DETERMINER, DE MANIERE NON INVASIVE, LA TENEUR EN HUMIDITE ET L'UNIFORMITE D'UNE MATIERE VEGETALE SOLIDE PENDANT LE TRAITEMENT EN LIGNE A AIR PULSE DE SECHAGE OU DE REFROIDISSEMENT

Publication

EP 1277044 A4 20100303 (EN)

Application

EP 01922466 A 20010319

Priority

- US 0108743 W 20010319
- US 54638300 A 20000410

Abstract (en)

[origin: WO0177630A2] Method and device for non-invasively determining moisture content and uniformity of solid plant matter during on-line drying or cooling forced-air treatment featuring measuring primary operating parameters of temperature, humidity, and flow rate of forced-air entering and exiting the volume of solid plant matter moving through an on-line drying or cooling forced-air treatment device. Empirically determined data relating the influence of secondary operating parameters of volumetric bulk material transport rate of the solid plant matter, type of the solid plant matter, and physicochemical characteristics and properties of the solid plant matter, on the sensing and measuring of the primary forced-air operating parameters are used for process correcting raw temperature, humidity, and flow rate, parametric values of the forced-air entering and existing the solid plant matter, leading to the determination of highly accurate and reproducible values of moisture content and uniformity of the solid plant matter. Moisture content and uniformity values correspond to the volume of the solid plant matter.

[origin: WO0177630A2] Method and device (10) for non-invasively determining moisture content and uniformity of solid plant matter (50) during on-line drying or cooling forced-air treatment featuring measuring primary operating parameters of temperature, humidity, and flow rate of forced-air entering and exiting the volume of solid plant matter moving through an on-line drying or cooling forced-air treatment device (10). Empirically determined data relating the influence of secondary operating parameters of volumetric bulk material transport rate of the solid plant matter, type of the solid plant matter, and physicochemical characteristics and properties of the solid plant matter, on the sensing and measuring of the primary forced-air operating parameters are used for process correcting raw temperature, humidity, and flow rate, parametric values of the forced-air entering and existing the solid plant matter, leading to the determination of highly accurate and reproducible values of moisture content and uniformity of the solid plant matter. Moisture content and uniformity values correspond to the volume of the solid plant matter.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [A] JP S61281939 A 19861212 - KANEBO LTD
- [A] GB 691332 A 19530513 - KARL TRISCHBERGER
- [A] US 5163454 A 19921117 - CLEMONS VERNOL G [US]
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- See references of WO 0177630A2

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DOCDB simple family (application)

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